

INSTITUTIONAL ASSESSMENT AND ACCREDITATION (Effective from July 2017)

Accreditation - (Cycle - 1)

PEER TEAM REPORT ON

INSTITUTIONAL ACCREDITATION OF GOVERNMENT COLLEGE OF ENGINEERING, SALEM

Salem Tamil Nadu 636011

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL An Autonomous Institution of the University Grants Commission P.O. Box No. 1075, Nagarbhavi, Bengaluru - 560 072, INDIA

Section I:GENERAL INFORMATION

1.Name & Address of the institution:	GOVERNMENT COLLEGE OF ENGINEERING, SALEM Salem Tamil Nadu		
	636011		
2.Year of Establishment	1966		
3.Current Academic Activities at the Institution(Numbers):			
Faculties/Schools:			
Departments/Centres:	6		
Programmes/Course offered:	16		
Permanent Faculty Members:	78		
Permanent Support Staff:	98		
Students:	2148		
4.Three major features in the institutional Context (Asperceived by the Peer Team):	1. More than 50 Years old Institution2. One of the most sought institute by the top rankers of the region3. Unique planetarium in the campus		
5.Dates of visit of the Peer Team (A detailed visit schedule may be included as Annexure):	From : 12-10-2018 To : 13-10-2018		
6.Composition of Peer Team which undertook the on site visit:			
	Name	Designation & Organisation Name	
Chairperson	DR. KUMAR VELLANKI	FormerVice Chancellor,JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA	
Member Co-ordinator:	DR. PRATOSH BANSAL	Professor,INSTITUTE OF ENGINEERING AND TECHNOLOGY DEVI AHILYA VISHWAVIDYALAYA	
Member:	DR. SATISH CHANDRA SHARMA	Professor,IIT ROORKEE	
NAAC Co - ordinator:	Dr. Vishnu Mahesh K R		

Section II:CRITERION WISE ANALYSIS

Observations (Strengths and/or Weaknesses) on each qualitative metrices of the key Indicator under the respective criterion(This will be a qualitative analysis of descriptive nature aimed at critical analysis presenting strength and weakness of HEI under each criteria)

Criterion1 - Curricular Aspects (Key Indicator and Qualitative Metrices(QlM) in Criterion1)		
1.1	Curriculum Design and Development	
1.1.1	Curricula developed /adopted have relevance to the local/ national / regional/global developmental	
QlM	needs with learning objectives including program outcomes, program specific outcomes and	
	course outcomes of all the program offered by the Institution	
1.2	Academic Flexibility	
1.3	Curriculum Enrichment	
1.3.1	Institution integrates cross cutting issues relevant to Gender, Environment and Sustainability,	
QlM	Human Values and Professional Ethics into the Curriculum	
1.4	Feedback System	

Qualitative analysis of Criterion 1

Government College of Engineering, Salem conferred with Autonomous status by UGC in 2009. Being an autonomous institution, curricula, course contents are designed and implemented by the institution itself. Curricula developed based on the feedbacks from the stakeholders. Departments conduct Board of Studies meeting at regular intervals to assess and revise the curriculum and syllabus. An industry expert member is nominated in all the Board of Studies and revision is made as per the industry demands. Alumni contribute for updating the syllabus as per the needs of the industry.

Program Educational Objectives (PEOs), Program Outcomes (POs), Program Specific Outcomes (PSOs) and course outcomes (COs) have been specified and mapped.

After getting autonomous status institute has come up with four regulations - 2009 Regulation (UG & PG), 2012 Regulation (UG & PG), 2016 Regulation (UG & PG) and latest 2018 Regulation (UG & PG).

Institute made provision of open electives, employability enhancement courses, mini project works and project works. Subjects on professional ethics and human values, environment impact assessment, renewable energy resources, solid wastes management, metallurgical waste utilization and Management, research methodology and IPR have been introduced to make the students more employable.

MHRD programs like SWAYAM on MOOCs platform, NPTEL supplement and value to the curriculum. The institute may put an additional effort to organize more personality and soft skill development programs to cater to the needs of rural students.

Criterion2	Criterion2 - Teaching-learning and Evaluation (Key Indicator and Qualitative Metrices(QlM) in Criterion2)		
2.1	Student Enrollment and Profile		
2.2	Catering to Student Diversity		
2.2.1	The institution assesses the learning levels of the students, after admission and organises special		
QlM	programs for advanced learners and slow learners		
2.3	Teaching- Learning Process		
2.3.1	Student centric methods, such as experiential learning, participative learning and problem solving		
QlM	methodologies are used for enhancing learning experiences		
2.3.4	Preparation and adherence to Academic Calendar and Teaching plans by the institution		
QlM			
2.4	Teacher Profile and Quality		
2.5	Evaluation Process and Reforms		
2.5.4	Positive impact of reforms on the examination procedures and processes including IT integration		
QlM	and continuous internal assessment on the examination management system		
2.6	Student Performance and Learning Outcomes		
2.6.1	Program outcomes, program specific outcomes and course outcomes for all programs offered by		
QlM	the Institution are stated and displayed on website and communicated to teachers and students		
2.6.2	Attainment of program outcomes, program specific outcomes and course outcomes are evaluated		
QlM	by the institution		
2.7	Student Satisfaction Survey		

The institute is conducting orientation/induction programme for newly admitted students as per AICTE guidelines.

Bridge Courses like English language classes and extra classes are conducted mainly for first year students.

Effective provision is to be made for conducting remedial classes for the slow learners after first year. Fast learners are motivated to get online certification and to participate in technical events. Fast learners are identified by the teachers on the basis of internal assessment and interaction in the class room. However systematic approach is needed for identifying slow and fast learners as per the specific need.

Outcome based education motivating the students to select the courses which provides employability is in place.

Participatory learning such as seminars, quizzes and symposium and problem solving capability and in plant training are in place. Institute prepares and follows the academic calendar.

Institution also follows the Continuous internal assessment (CIA). This system is transparent and answer books are shown to the students.

Time bound and efficient method of grievance redressal system related to examination is followed. Examination system is partially automated. IT integration generates issuing of admit cards and processing the result. The process needs to be upgraded to some extent.

Programme outcomes, Programme Specific outcomes and course outcomes for all programmes are communicated to stake holders by displaying them in the department facilities and hosted in the college

websites. Attainment of Programme outcomes, Programme Specific outcomes and course outcomes are monitored and assessed by the department.

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Criterion3 - Research, Innovations and Extension (Key Indicator and Qualitative Metrices(QlM) in			
Criterion3	Criterion3)		
3.1	Promotion of Research and Facilities		
3.2	Resource Mobilization for Research		
3.3	Innovation Ecosystem		
3.3.1	Institution has created an eco system for innovations including Incubation centre and other		
QlM	initiatives for creation and transfer of knowledge		
3.4	Research Publications and Awards		
3.5	Consultancy		
3.6	Extension Activities		
3.6.1	Extension activities in the neighbourhood community in terms of impact and sensitising students		
QlM	to social issues and holistic development during the last five years		
3.7	Collaboration		

Institution follows the guidelines and regulations of Anna University for the promotion of research. The institution encourages the teachers for research activity with TEQIP scheme for attending Conferences and Seminars on advanced topics.

All departments are recognized as research centers by Anna University, Chennai. Incentives given through TEQIP scheme for registration fee, paper publishing, attending conferences and FDP to faculty members for the promotion of research activities. R & D cell has been established to co-ordinate all the research activities of the institution.

There are 33 teachers who are recognized as research guides. In total 66 candidates were awarded for Ph.D. in the last five years.

Number of publications in referee journals are satisfactory with good citations for the last five years. But, it still needs improvement

The institute has well framed consultancy policy. Civil Engineering Department has taken up many consultancy projects during the last five years.

The Institute supports all the departments to conduct National and International conferences. Some of the faculty members are in the editorial board of the journals and acting as reviewers. Exposure to international conferences needs some improvement.

For the last five years, very few funded projects were sponsored by UGC, AICTE, MHRD, and TNSCST. Also, the amount generated through sponsored research projects is insignificant.

Institution has recently established start up cell for promoting the budding entrepreneurs. However, it needs some improvement to mature these activities in the campus.

Institute is now making efforts in creating innovation eco system. Some faculty were trained in the areas of "Start-up activities & preparation of action plan" and "Certificate Course on Patent Search and Drafting." Students are motivated to participate in "Start-up Conclave".

The awareness about the Intellectual Property Rights are imparted to the faculty through workshops. Two faculty members have filed and published for patents.

Some departments have carried our extension activities. National level METAL Quiz has been conducted by department of Metallurgy in collaboration with Indian Institute of Metals for the school students.

Major extension activities are conducted through NSS, NCC, ROTARACT club, LEO club, Youth Red Cross.

Criterion4	Criterion4 - Infrastructure and Learning Resources (Key Indicator and Qualitative Metrices(QlM) in		
Criterion4)		
4.1	Physical Facilities		
4.1.1	The institution has adequate facilities for teaching - learning. viz., classrooms, laboratories,		
QlM	computing equipment, etc		
4.1.2	The institution has adequate facilities for sports, games (indoor, outdoor),gymnasium, yoga centre		
QlM	etc., and cultural activities		
4.2	Library as a Learning Resource		
4.2.1	Library is automated using Integrated Library Management System (ILMS)		
QlM			
4.2.2	Collection of rare books, manuscripts, special reports or any other knowledge resource for library		
QlM	enrichment		
4.3	IT Infrastructure		
4.3.1	Institution frequently updates its IT facilities including Wi-Fi		
QlM			
4.4	Maintenance of Campus Infrastructure		
4.4.2	There are established systems and procedures for maintaining and utilizing physical, academic		
QlM	and support facilities - laboratory, library, sports complex, computers, classrooms etc.		

The Institution has adequate infrastructural facilities for teaching-learning activities. They have smart and ICT enabled class rooms. Good number of ventilated and illuminated classrooms are in existence. Every department has seminar halls, well equipped laboratories, video conferencing hall, smart boards and departmental libraries.

Institute is one of the 33 regional centres in India to collaborate with IIT, Mumbai and ISTE to offer courses and training through video conferencing.

Regular classes are also offered to students under Quality Enhancement in Engineering Education (QEEE) and Anna University EDUSAT programs.

Very good networking with OFC connectivity between various departments is available, providing high speed connectivity. Campus wide Wi-Fi networking is available including both the boys and girls hostels.

There is big digital library to access e-journals, e-books and NPTEL video lectures. The institute library is partially automated with Koha Library Management Software.

The institution has big play ground and adequate facilities for outdoor games. Sports kit and gymnasium equipment are old and need major up-gradation.

One big auditorium is also there for cultural activities. However auditorium building needs maintenance. There is a need to make it sound proof and install, new sound system with good projection system.

Consumer co-operative stores, reprographic facilities, bank and two ATMs, post office and a health centre are available in the campus. Four blocks of boys hostel and two blocks of girls hostel are also in the campus.

Some building needs maintenance on immediate basis. Public Works Department (PWD) of the State

Government looks after the construction and development process as per the government rules.



Criterion5 - Student Support and Progression (Key Indicator and Qualitative Metrices(QlM) in Criterion5)		
5.1	Student Support	
5.2	Student Progression	
5.3	Student Participation and Activities	
5.3.2	Presence of an active Student Council & representation of students on academic & administrative	
QlM	bodies/committees of the institution	
5.4	Alumni Engagement	
5.4.1	The Alumni Association/Chapters (registered and functional) contributes significantly to the	
QlM	development of the institution through financial and non financial means during the last five years	

There is an active student council is in place and also institution has representation of students on academic and administrative bodies.

The Institute has various active councils to enrich the knowledge of the students by framing regulations and curriculum to meet the industry needs.

The council identifies the students related issues and provide valuable suggestions to resolve and helps in mentoring student for placement and better performance in curricular activities.

The alumni association is registered and functional. Alumni have contributed substantially to the development of the institution through financial and non-financial means during the last five years.

The alumni are providing scholarships to needy students in the Institute. The alumni of the Institute is supporting the current students for project works, in-plant trainings, industrial visits and placements.

The Alumni members frequently visit their Departments and deliver guest lecture and motivate the students.

Criterion	6 - Governance, Leadership and Management (Key Indicator and Qualitative Metrices(QIM) in	
Criterion		
6.1	Institutional Vision and Leadership	
6.1.1	The governance of the institution is reflective of an effective leadership in tune with the vision	
QlM	and mission of the institution	
6.1.2	The institution practices decentralization and participative management	
QlM		
6.2	Strategy Development and Deployment	
6.2.1	Perspective/Strategic plan and Deployment documents are available in the institution	
QlM		
6.2.2	Organizational structure of the institution including governing body, administrative setup, and	
QlM	functions of various bodies, service rules, procedures, recruitment, promotional policies as well as grievance redressal mechanism	
6.2.4	Effectiveness of various bodies/cells/committees is evident through minutes of meetings and	
QlM	implementation of their resolutions	
6.3	Faculty Empowerment Strategies	
6.3.1	The institution has effective welfare measures for teaching and non-teaching staff	
QlM		
6.3.5	Institution has Performance Appraisal System for teaching and non-teaching staff	
QlM		
6.4	Financial Management and Resource Mobilization	
6.4.1	Institution conducts internal and external financial audits regularly	
QlM		
6.4.3	Institutional strategies for mobilisation of funds and the optimal utilisation of resources	
QlM		
6.5	Internal Quality Assurance System	
6.5.1	Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the	
QlM	quality assurance strategies and processes	
6.5.2	The institution reviews its teaching learning process, structures & methodologies of operations	
QlM	and learning outcomes at periodic intervals through IQAC set up as per norms	
6.5.5	Incremental improvements made during the preceding five years (in case of first cycle)	
QlM		
	Post accreditation quality initiatives (second and subsequent cycles)	

The college has duly constituted Governing Body consisting of eminent persons and meets periodically. This is the highest body for preparing vision and mission of the institute. Governing body has also designed and developed the strategic plans to achieve the vision and mission.

However, the institute with more than 50 years of standing, effective implementation of strategic plan and growth needs to be visible.

Hierarchal organizational structure exists in the institution. All bodies have well defined role and functions. There are defined service rules, procedures for recruitment and promotional policies along with grievance redressal mechanism. The faculty meetings at Institute level and Department level are convened periodically to design and assess the progress of short term and long term development plans. The Head of the Institution ensures the participation of each and every individual of the Institute in the development activities of the Institute. These sub-committees are constituted in such a way to involve various stake holders of the Institute to receive their representation.

Grievance Redressal Committee constituted with male and female faculty members, ministerial staff, parents, non-teaching staff, administrative staff and student representatives to address grievances of the various stakeholders of the Institute.

The institution has effective welfare measures for teaching and non-teaching staff as per the state government norms. Institution has Performance Appraisal System for teaching and non-teaching staff. Institution conducts internal and external financial audits regularly. The confidentiality report (CR) of every faculty member is submitted every year.

Internal audit consists of regular checks on deposits, with drawl and payments by or to the institution through the bank statements. The Directorate of Technical Education conducts internal audit every year during the month of April/May and Director General do external auditing. A compliance report is submitted for the information and consideration to the competent authority. The internal stock verification is conducted every year in all the Departments and stock verification team submits the report to the Head of the Institution.

The institution submits its budgetary requirements annually. Accordingly the institution receives the block grant from state government for different purpose. The Institute receives funding from State Government as Block Grant and TEQIP. The Institute has finance committee to monitor the effective mobilization of funds and optimal utilization of resources.

Internal Quality Assurance Cell (IQAC) is in place. Marginal incremental improvement is visible in the last five years. Some of the activities done by IQAC include assessment and evaluation of outcomes, feedback analysis for improvements, Academic Administrative Audit (AAA) and initiation of follow up action and Participation in NIRF.

Criterior	7 - Institutional Values and Best Practices (Key Indicator and Qualitative Metrices(QIM) in		
Criterior			
7.1	Institutional Values and Social Responsibilities		
7.1.2	Institution shows gender sensitivity in providing facilities such as		
QIM	a) Safety and Security		
	b) Counselling		
	c) Common Room		
7.1.5	Waste Management steps including:		
QlM	Solid waste management		
	Liquid waste management		
	• E-waste management		
7.1.6	Rain water harvesting structures and utilization in the campus		
QlM			
7.1.7	Green Practices		
QlM	Students, staff using		
	a) Bicycles		
	b) Public Transport		
	c) Pedestrian friendly roads		
	Plastic-free campus		
	Paperless office		
	Green landscaping with trees and plants		
7.1.18	Institution organizes national festivals and birth / death anniversaries of the great Indian		
QlM	personalities		
7.1.19	The institution maintains complete transparency in its financial, academic, administrative and		
QlM	auxiliary functions		
7.2	Best Practices		
7.2.1	Describe at least two institutional best practices (as per NAAC Format)		
QlM			
7.3	Institutional Distinctiveness		
7.3.1	Describe/Explain the performance of the institution in one area distinctive to its vision, priority		
QlM	and thrust		

The College is quite sensitive towards gender equity, environmentally green practices, human values and professional ethics and makes adequate efforts in inculcating these values in students, staff members, and society.

Green landscaping is available with trees, and plants. There is a Grievance Redressal Committee and Internal Complaints Committee to facilitate reporting and redressal of any gender related issue.

Safety and security is visible inside the campus and hostel premises. The institute has a practice of collecting solid waste in large dust bins at various locations and periodically removed by local panchayats.

Two numbers of Oxidation ponds are available for treating waste water. Treated water is used for watering the plantations.

The rain water harvesting structures exists in the RCC buildings to collect rain water from roof top to replenish the ground water.

The institute buildings are located in green surroundings. There are several trees and plants available on the campus. Tree plantation is a regular activity in the College. More than 8000 saplings are planted in the institution campus recently.

Health centre is available to cater the needs of the students, faculty, staff and their family. The College use public transport through various parts of the City. Majority of the students, faculty members and supporting staff commute using bicycles and these buses.

Ramps and hand rails are provided in all the departments. Apart from these, measures are taken to reduce energy consumption on the campus. Some of them use of natural lighting and ventilation owing to the location and architectural design of the building.

Section III:OVERALL ANALYSIS based on Institutional strengths. Weaknesses, Opportunities & Challenges (SWOC) (up to 500 words)

Strength:

Strength:

- State government funded institution.
- World bank financial assistance through TEQIP
- Meritorious students
- Good infrastructure facilities, amenities with serene environment
- The percentage of girl students is higher than national average
- Large Alumni base

Weakness:

- Limited funding from Govt/Non-government funding agencies
- Less number of faculty with Ph.D. qualifications
- Limited research activities
- Few publications in internationally peer reviewed research journals.
- Lack of regular and timely maintenance by the PWD

Opportunities:

- Brand to be utilized more effectively
- Promotion of online teaching
- Strengthen Skill development programs and incubation centre
- Set up research centres on multi disciplinary areas.
- Promotion of consultancy services by other departments

Challenges:

- Attracting students with diverse background
- Attracting and retaining doctoral faculty with high research credentials
- Establishing in house research facilities
- To provide good employability to students with good packages
- Attracting funded projects and collaborations for research activity

Section IV:Recommendations for Quality Enhancement of the Institution

(Please limit to **ten major ones** and use telegraphic language) (It is not necessary to indicate all the ten bullets)

- More electives should be offered to provide employability
- Forge more number of MoUs from peer institutes of National/International importance.
- Faculty should be encouraged to join for the Ph.D programs
- Institute must make effort to have in plant training of the students in core industries
- Introduce more number of viable PG programs
- Efforts should be made to establish incubation centre.
- Technical expertise should be utilized for betterment of society by providing more extension activities
- Regular maintenance of the buildings needs improvement
- Indoor sports facilities is to be created
- Make efforts to attract more companies for placements for more pay package
- Faculty should be motivated to get more funding from the funding agencies like DST, AICTE etc.

I have gone through the observations of the Peer Team as mentioned in this report

Signature of the Head of the Institution

Seal of the Institution

Sl.No	Name		Signature with date
1	DR. KUMAR VELLANKI	Chairperson	
2	DR. PRATOSH BANSAL	Member Co-ordinator	
3	DR. SATISH CHANDRA SHARMA	Member	
4	Dr. Vishnu Mahesh K R	NAAC Co - ordinator	

Place

Date

